

**REMARKS**

Claims 1, 13 and 21 have been amended. Claim 12 has been cancelled, without prejudice. Claims 1, 4, 6, 8-11, 13, 15-17 and 19-21 are in the application upon entry of this amendment. Entry of this amendment, and reexamination and reconsideration of the present application in light of the above amendments and the following remarks is respectfully requested.

Claim 1 has been amended to indicate that the concentration of the polymer (A) is from about 15% to about 40% by weight. Support for this range can be found in the applicants' specification at page 2, lines 30-31; page 5, lines 26-27; and in original claim 1. Claims 1 and 13 have been amended to cover gear oils. Support that amendment is found in originally filed claim 1.

Claims 1 and 13 have been amended by deletion of the following language: "the fluidizing agent being selected from the group consisting of alkylated aromatic hydrocarbons, poly  $\alpha$ -olefins having a kinematic viscosity in the range of about 2 to about 30 cSt at 100°C, and mixtures thereof." The foregoing language was added to claims 1 and 13 with the amendment filed August 12, 2002 and is now being deleted.

Claim 13 has been amended to change the concentration of (B) from "about 10% to about 30%" to "up to about 30%." Support for this amendment can be found in the applicants' specification at page 12, line 15.

Claim 13 has been amended to include the language "provided that when the fluidizing agent is a poly $\alpha$ -olefin having a kinematic viscosity from about 2 to about 30 cSt at 100°C, then the poly $\alpha$ -olefin is present in an amount up to about 12% by weight." Support for this amendment can be found in the applicants' specification at page 12, lines 15-18.

Claim 21 has been amended to clarify the fact that the composition further comprises an antioxidant in an amount sufficient to deliver at least about 0.04% by weight nitrogen to the lubricating composition. Support for this amendment can be found in the applicants' specification at page 47, lines 17-18.

Claims 1, 4, 6, 8-11, 13, 15-17 and 19-21 have been rejected under 35 U.S.C. §103(a) as unpatentable over the teachings in Tipton et al. (U.S. Patent 4,594,378).

Tipton et al. discloses polymeric compositions that are useful in automatic transmission fluids, manual transmission fluids and hydraulic fluids. The polymeric compositions disclosed in this reference comprise a mixture of (A) at least one oil-soluble polymer which is a homopolymer of a non-aromatic monoolefin or a copolymer of said non-aromatic monoolefin with an aromatic monoolefin, and (B-1) at least one nitrogen-containing ester of a carboxy-containing interpolymer, and/or (B-2) at least one oil-soluble acrylate polymerization product of at least one acrylate ester, or a mixture of one or more of (B-1) and (B-2). The reference indicates that these compositions may also contain (C) at least one low temperature viscosity-reducing liquid organic diluent such as a naphthenic oil or certain other natural and synthetic oils having the desired low temperature properties. Tipton et al. does not, however, disclose or suggest use of the ethylene- $\alpha$ -olefin copolymers or terpolymers of ethylene, propylene and a diene monomer, or mixtures thereof, as specified in the applicants' amended claims 1 and 13.

Applicants submit that the claims now are directed to gear oils. Gear oils are those oils that are used in differentials or industrial gear sets which are exposed to higher shear rates. Often gear oils are exposed to hypoid gear surfaces. It has been found that the presently claimed compositions provide good shear stability for gear oils while not sacrificing low temperature performance.

Tipton, as described previously, relates to automatic transmission fluids, manual transmission fluids and hydraulic fluids. Tipton does not teach or suggest gear oil compositions. Accordingly, applicant submits that Tipton does not render the presently amended claims obvious.

Applicants respectfully submit that the application is now in condition for allowance. A Notice of Allowance is respectfully requested. In the alternative, entry of amendment is requested for purposes of an appeal.

Docket No. 2730R-01

Serial No: 08/888,462

Respectfully submitted,

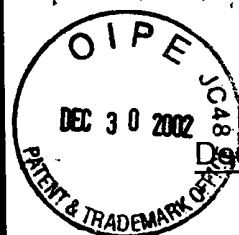
THE LUBRIZOL CORPORATION

By

A handwritten signature in dark ink, appearing to read "William C. Tritt", is written over a horizontal line.

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**APPENDIX - - Amendment Version With Markings to Show Changes Made**

Claim 12 has been cancelled.

Claims 1,13 and 21 have been amended as follows:

1. (Three Times Amended) A multigrade gear lubricating composition comprising at least about 30% by weight of at least one mineral oil having a kinematic viscosity of less than about 8 cSt at 100°C, (A) from about 15% [20%] to about 40% by weight of at least one polymer having a  $\bar{M}_w$  less than 50,000, the polymer being selected from the group consisting of polyalkylenes, terpolymers of ethylene, propylene and a diene monomer, and mixtures thereof, and (B) up to about 30% by weight of at least one fluidizing agent, [the fluidizing agent being selected from the group consisting of alkylated aromatic hydrocarbons, poly  $\alpha$ -olefins having a kinematic viscosity in the range of about 2 to about 30 cSt at 100°C, and mixtures thereof,] provided that when the fluidizing agent is a poly $\alpha$ -olefin having a kinematic viscosity from about 2 to about 30 cSt at 100°C, then the poly $\alpha$ -olefin is present in an amount up to about 12% by weight, wherein the lubricating composition has a shear loss of less than about 15% in the 20 hour taper bearing shear test.

13. (Three Times Amended) A multigrade gear lubricating composition comprising at least about 30% by weight of at least one mineral oil having a kinematic viscosity of less than about 8 cSt at 100°C, and an amount of a concentrate, sufficient to deliver to the multigrade lubricating composition, (A) from about 15% to about 40% by weight of at least one polymer having a  $\bar{M}_w$  from about 1000 to about 45,000, the polymer being selected from the group consisting of polyalkylene, terpolymers of ethylene, propylene and a diene monomer, and mixtures thereof, and (B) [from about 10%] up to about 30% by weight of at least one fluidizing agent, provided that when the fluidizing agent is a poly $\alpha$ -olefin having a kinematic viscosity from about 2 to about 30 cSt at 100°C, then the poly $\alpha$ -olefin is present in an amount up to about 12% by weight. [the fluidizing

agent being selected from the group consisting of alkylated aromatic hydrocarbons, poly  $\alpha$ -olefins having a kinematic viscosity in the range of about 2 to about 30 cSt at 100°C, and mixtures thereof] wherein the lubricating composition has a shear loss of less than about 15% in the 20 hour taper bearing shear test.

21. (Amended) The composition of claim 13 further comprising an amount of antioxidant sufficient to deliver at least about 0.04% by weight nitrogen to the lubricating composition.